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DIALYSIS TECHNICIAN TRAINING PROGRAM GUIDE

STATUTORY REFERENCE

In 2001, the Kentucky General Assembly passed House Bill 184 establishing authority for the Kentucky Board of Nursing to regulate dialysis technician practice, training and credentialing.

KRS Chapter 314 contains the statutory citations related to the regulation of dialysis technicians and the requirement that the Board promulgate administrative regulations governing the educational requirements for dialysis technicians and the standards for technician training programs. Sections 7 through 11 of 201 KAR 20:470 (Dialysis Technician Credentialing Requirements and Training Program Standards) govern training program standards and set forth criteria for Board approval of training programs.

PURPOSE

This guide includes the minimum content to be included in a Board approved dialysis technician training program. Individuals who are cross-trained to perform roles other than, or in addition to, the dialysis technician role, such as “Water Technician”, or “Re-Use Technician”, should receive additional training to perform those duties in a safe, effective manner.

PROGRAM DESCRIPTION

Dialysis technician training programs are designed to provide fundamental knowledge, skills and competencies needed by technicians to perform specified dialysis care procedures under the direct, on-site supervision and delegation of a registered nurse or physician.

PROGRAM OUTCOMES

Upon completion of this program the dialysis technician will:

- Perform dialysis care in a safe and effective manner in accordance with standards and regulation governing dialysis practice.
- Communicate effectively with patients, families and multidisciplinary team members.
- Demonstrate self-direction and responsibility for maintaining current clinical competency.
- Demonstrate accountability of practice with adherence to ethical and legal standards of dialysis practice.

PROGRAM OBJECTIVES AND CONTENT

The curricula of the program shall minimally include, but not be limited to, the topics listed below. Upon completion of all instructional components of a training program, the trainee should demonstrate the ability to:

1. Discuss the legal and ethical aspects of practice.
 - A. Discuss the history of dialysis.
 - B. Discuss state and federal regulations governing dialysis.
 - C. Discuss the resources available for pursuing personal and career development.
 - D. Discuss the principles and legal aspects of documentation, communication and patient rights.
 - E. Discuss the roles of the dialysis technician and other multidisciplinary team members.
 - F. Discuss principles related to patient safety.
2. Discuss anatomy and physiology applicable to renal function.
 - A. Describe renal anatomy.
 - B. Identify organs of the urinary system and components of the nephron.
 - C. Describe functions of the normal kidney.
3. Discuss diseases of the kidney.
 - A. Identify causes and complications of acute renal failure.
 - B. Identify causes and complications of chronic renal failure.
4. Discuss the psychosocial and physical needs of the end stage renal disease (ESRD) patient and family.
 - A. Identify the impact on family and social systems.
 - B. Discuss coping mechanisms utilized.
 - C. Discuss rehabilitative needs.
 - D. Identify the community resources available.
 - E. Discuss all aspects of renal diet and fluid restrictions.
 - F. Identify educational needs of patients receiving dialysis including the role of the technician and resources available.
5. Discuss the principles of pharmacology as related to ESRD.
 - A. Identify commonly used medications and their side effects.
 - B. Demonstrate knowledge of the principles of medication administration.
 - C. Describe the indications, dosage, action, and adverse effects of heparin, local anesthetics, and normal saline.
 - D. Demonstrate the accurate administration of heparin, local anesthetics and normal saline.
6. Discuss aseptic techniques and established infection control practices.
 - A. Discuss and demonstrate dialysis precautions as issued by the Center for Disease Control.
 - B. Demonstrate proper hand washing technique.

7. Discuss principles of dialysis and dialysis treatment
 - A. Demonstrate knowledge of definitions and terminology.
 - B. Discuss principles of osmosis, diffusion, ultrafiltration and fluid dynamic.
 - C. Describe the structure and function of various types of circulatory access sites and devices.
 - D. Compare the indications, advantages, disadvantages and complications of internal arteriovenous (A/V) fistulas and A/V grafts, and central venous access devices.
 - E. Identify and discuss the various types of dialyzers.
 - F. Discuss the benefits, risks and precautions associated with dialyzer reuse.
 - G. Discuss the purpose and concept of water treatment.
 - H. Demonstrate the knowledge and ability to manage and operate dialysis equipment.
 - I. Demonstrate the knowledge and ability to appropriately monitor and collect data throughout the course of treatment.
 - J. Identify & discuss the etiology, signs/ symptoms, prevention, intervention and treatment options for the most common complications.
 - K. Demonstrate the knowledge and ability to safely initiate and discontinue treatment.
 - L. Identify routine laboratory tests, values and collection techniques.

8. Discuss other treatment modalities for ESRD.
 - A. Discuss renal transplantation.
 - B. Discuss home dialysis options.

PROGRAM TIME FRAME

The classroom instruction shall extend over a period of time sufficient to provide essential, sequenced learning experiences, which enable a dialysis technician trainee to acquire the necessary knowledge to provide dialysis care in a safe, effective manner. The supervised clinical experience shall extend over a period of time sufficient to provide opportunities for the application of theory and for the achievement of the program outcomes, and shall include clinical learning experiences to develop the skills required by technicians to provide safe patient care.

SKILLS COMPETENCY VALIDATION FORM/CHECKLIST

The program shall require the trainee to demonstrate clinical competencies. Subsequently, the program shall establish a skills validation form/checklist that documents the ability of the trainee to competently perform the skills taught in the program and documents the ability of the trainee to perform dialysis care in a safe, effective manner.

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